

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A stereo camera system comprising:
stereo imaging means for outputting at least one stereo image,
said stereo imaging means including:

a camera; and

a set of planar mirrors angled with respect to each other at a predetermined angle relative to a centrally located common plane intersecting said camera, each planar mirror having adjacent ends positioned at a common point and disposed a predetermined distance from the camera along the common plane, for directing light from an object reflected in said planar mirrors along a straight line of sight directly from said planar mirrors to the camera, for producing a stereo effect in the output of the camera;

recognition means for locating an object of interest in the field of view of the stereo imaging means and at least one of a distance of the object of interest from the stereo imaging means and the size of the object of interest; and

adjusting means for automatically changing at least one system parameter which affects the spatial resolution of the object of

interest based on at least one of the located distance of the object of interest from the stereo imaging means and the size of the object of interest.

2. (Canceled)

3. (Previously presented) The stereo camera system of claim 1, wherein the camera is a still camera and the at least one stereo image is a still image.

4. (Previously presented) The stereo camera system of claim 1, wherein the camera is a video camera and the at least one stereo image is a sequence of video images.

5. (Currently amended) The stereo camera system of claim 1, wherein the adjusting means comprises at least one of:

angle adjustment means for adjusting the predetermined angle between the set of planar mirrors;

distance adjustment means for adjusting the predetermined distance between the camera and the set of planar mirrors; and

focal length adjustment means for changing a focal length of the camera.

6. (Original) The stereo camera of claim 5, further comprising a controller for controlling at least one of the angle, distance, and focal length adjustment means based on an input signal from the recognition means.

7-10. (Canceled)

11. (Previously presented) The stereo camera of claim 1, further comprising a controller for controlling at least one of the angle, baseline, distance, and focal length adjustment means based on an input signal from the recognition means.

12. (Original) The stereo camera system of claim 1, wherein the recognition means is a stereo vision system.

13-20. (Canceled)

21. (Currently amended) A method for adjusting a stereo camera system to control spatial resolution of an object of interest in the field of view of a stereo imaging means, the method comprising the steps of:

outputting at least one image from the stereo imaging means;

locating an object of interest in the field of view of the stereo imaging means and at least one of the distance of the object of interest from the stereo imaging means and the size of the object of interest;

automatically changing at least one system parameter which affects the spatial resolution of the object of interest based on at least one of the located distance of the object of interest from the stereo imaging means and the size of the object of interest; and

providing said stereo imaging means by further including the steps of:

using a camera to receive light from said object;

establishing a predetermined angle between a set of planar mirrors, the angle being relative to a centrally located common plane intersecting said camera, and adjacent ends of said planar mirrors; mirrors being positioned at a common point of origin; and

establishing a predetermined distance from the camera and the adjacent ends of said planar mirrors for reflecting light from said object from said planar mirrors along a straight line of sight directly to said camera, for producing a stereo effect in the output of the camera.

22. (Currently amended): A stereo camera system comprising:

a stereo imaging means including two video cameras, each camera being angled a predetermined angle and distanced a predetermined distance with respect to each other and the object of interest, for outputting at least one stereo image as a sequence of video images;

recognition means for locating an object of interest in the field of view of the stereo imaging means and at least one of a distance of the object of interest from the stereo imaging means and the size of the object of interest;

adjusting means for automatically changing at least one system parameter which affects the spatial resolution of the object of interest based on at least one of the located distance of the object of interest from the stereo imaging means and the size of the object of interest, wherein the adjusting means comprises:

angle adjustment means for adjusting the predetermined angle of at least one of the two cameras;

baseline adjustment means for adjusting the predetermined distance between the two cameras;

distance adjusting means for adjusting a distance between at least one of the two cameras and the object of interest, wherein the distance adjusting means adjusts the distance independent of an angle of the at least one of the two cameras; and

focal length adjustment means for changing a focal length
of at least one of the two cameras.